DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-017619
Date Inspected: 25-Oct-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 1000
OSM Departure Time: 1830
Location: Job Site

CWI Name: Tom Pasqualone and Mike Johnso **CWI Present:** ☑ Yes ☐ No

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Orthotropic Box Girder

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 6E/7E top deck plate ‘A1’ outside, QA randomly observed ABF/JV qualified welder Fred Kaddu ID # 2188 perform CJP groove welding fourth time repair. The welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8” diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1001-Repairs. The repair was located at top deck plate A1 Y-dimension 550mm with excavation 180mm long x 30mm wide x 25mm deep. The boat shape excavation was preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC Mike Johnson was noted monitoring the welder. Prior welding, ABF QC Mike Johnson informed this QA that there was a verbal approval from ABF QC Manager Jim Bowers that was relayed to Smith Emery Supervisor Leonard Cross. QC was observed performing Magnetic Particle Testing (MT) using Parker Contour Probe with red magnetic powder as detecting media on the repair excavation prior welding. There were no significant defects noted during the test. During the shift, repair welding at the location mentioned above was completed.

At OBG 7W/8W top deck plate ‘A’ outside, QA randomly observed ABF/JV qualified welder James Zhen ID # 6001 perform CJP groove welding first time repair. The welder was observed welding in the 1G (flat) position utilizing Shielded metal Arc Welding (SMAW) with 1/8” diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1001-Repairs. The boat shape repair excavations having various dimensions were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC

Tom Pasqualone was noted monitoring the welder. Prior welding, ABF QC Tom Pasqualone was also observed performing Magnetic Particle Testing (MT) using Parker Contour Probe with red magnetic powder as detecting media on the repair excavations. There were no significant defects noted during the test. The following first time repairs were noted excavated and completely welded during the shift;

Location	Y-dimension	Length	Depth	Remarks
1. A1	0mm – 300mm	300mm	20mm	Completed
2. A5	4030mm – 4430mm	400mm	20mm	Completed
3. A5	5120mm – 5200mm	80mm	20mm	Completed
4. A5	5235mm – 5280mm	45mm	20mm	Completed

At OBG 6W/7W side plate ‘E’ outside, QA observed ABF personnel completed back gouging of the backing bar removal. After the completion of gouging, ABF personnel were noted performing grinding on the groove of the gouged splice butt joint backing bar removal. This task was also completed during the shift and the welders have called ABF QC for the Magnetic Particle Testing (MT) of the backing bar removal. ABF QC Steven Mc Connell was observed perform Magnetic Particle Testing (MT) on the backing bar removal of the splice joint. The ABF QC was using a Parker Contour electromagnetic yoke with and red magnetic powder as detecting media. There were no significant defects noted during the test. After the completion of the MT, ABF welders Rory Hogan and Kenneth Chappell were noted prepping their welding equipment to perform the 4G FCAW-G back welding on this joint.

At OBG 7W/8W side plate ‘C’ outside, QA randomly observed ABF welder Rick Clayborn tack welding fitting gear/temporary attachment to the side plate. The welder was welding in 4F (overhead) position using 1/8” diameter E7018H4R electrode. QA noted ABF QC Steven Mc Connell monitoring the welder and his parameter. During the shift, welding of the fitting gear/temporary attachment was completed and the backing bar was also put in place. After installing the backing bar, ABF QC went inside the box and checked the alignment. QC informed QA that during the initial measurements of the alignment he was getting 4.5mm and 3.0mm misalignment on some areas which he said still need more adjustment.

WELDING INSPECTION REPORT

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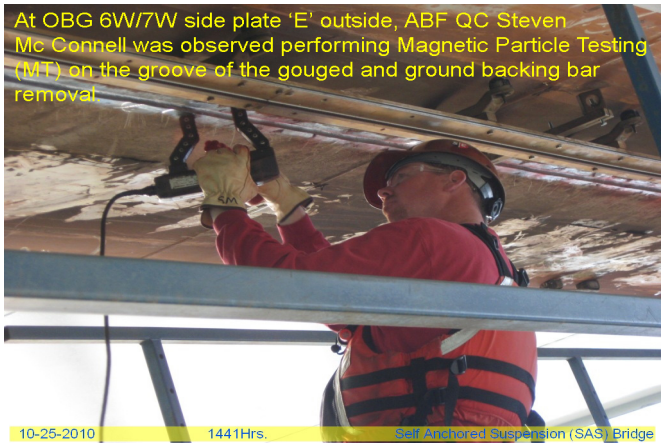

Summary of Conversations:

No significant conversation ocurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer